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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,027	10/31/2000	Harry C. Blackmon	82719	9051

20529 7590 12/27/2006

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112 South West Street
Alexandria, VA 22314

EXAMINER	
SAM, PHIRIN	
ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/703,027	BLACKMON ET AL.	
	Examiner	Art Unit	
	Phirin Sam	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 5-7, 9, 10, 21-28, 30, 32, 33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 7,031,252 (hereinafter referred as "Hosler").

Regarding claim 1, Hosler discloses a router system configured for distributing information packets from multiple sources to multiple destinations within a network, said router system comprising:

(a) a plurality of input and output facility interface circuit cards (see Fig. 2, elements 214, 216, 218, and 220, col. 5, lines 42-54);

(b) a plurality of line cards (see Fig. 2, elements 210 and 212, col. 5, lines 42-46, 49-51) different from said facility interface circuit cards (see Fig. 2, elements 214, 216, 218, and 220,

col. 5, lines 42-54), said line cards being configured to perform packet forwarding functions (see Fig. 2, col. 5, lines 55-63, col. 6, lines 22-24, 32-42, and col. 7, lines 66-67);

(c) a redundant pair of said facility interface circuit cards (see Fig. 2, elements 214 and 216 or 218 and 220, col. 5, lines 42-47, 49-54) connected in parallel to each said line card (see Fig. 2, elements 210 or 212, col. 5, lines 42-54), such that one and only one said line cards is connected to each of said paired redundant interface circuit cards (see Fig. 2, elements (210, 212, and 216) or (212, 218, and 220), col. 5, lines 42-54);

(d) wherein each of said facility interface circuit cards is connected to one and only one said line card (see Fig. 2, elements (214, 216, and 210) and (218, 220, and 212), col. 5, lines 42-54).

Regarding claim 3, Hosler discloses said paired redundant interface circuit cards are configured to operate in a one-for-one protection mode (see Fig. 2, col. 6, lines 35-42).

Regarding claims 5, 9, 21, and 22, Hosler discloses A communication network comprising a first router system, said first router system comprising:

(a) a plurality of input and output interface ports, each of said input and output interface ports comprising two paired duplicate interface circuit cards (see Fig. 2, elements 214 and 216 or 218 and 220, col. 5, lines 42-47, 49-54);

(b) a line card different from said interface circuit card, said line card being configured to perform packet forwarding functions (see Fig. 2, elements 214, 216, 218, and 220, col. 5, lines 42-63, col. 6, lines 22-24, 32-42, and col. 7, lines 66-67);

(c) wherein said paired duplicate interface circuit cards are each connected in parallel with one and only one said line card, such that one and only one said line card is connected to each of

said paired duplicate interface circuit cards (see Fig. 2, elements (214, 216, and 210) and (218, 220, and 212), col. 5, lines 42-54).

Regarding claim 6, Hosler discloses the first router system is disposed in a folded configuration, such that each of said paired duplicate interface circuit cards contains duplex input and output interface ports (see Fig. 2).

Regarding claim 7, Hosler discloses said first router system is disposed in a folded configuration, such that each of said line cards is configured to perform both input and output packet forwarding functions (see Fig. 2, col. 6, lines 12-25).

Regarding claim 10, Hosler discloses each of said duplicate data paths is configured to carry duplex data between said first and said second router systems (see Fig. 2, col. 5, lines 58-60).

Regarding claims 23, 25-28, and 30, Hosler discloses a method of distributing data streams within a communication system containing a plurality of router systems, said method comprising:

(a) receiving duplicate data streams at two paired duplicate interface circuit cards of a first router system (see Fig. 2, col. 5, lines 57-57, and col. 6, lines 22-25);

(b) delivering said duplicate data streams from said two paired duplicate interface circuit cards to one and only one line card separate from said two paired duplicate interface circuit cards (see Fig. 2, elements 214, 216, and 210, col. 5, lines 55-57);

(c) examining said duplicate data streams in accordance with predetermined selection criteria (see Fig. 2, col. 6, lines 22-30);

(d) if one said duplicate data stream satisfies said criteria and the second said duplicate data stream does not satisfy said criteria, then selecting said duplicate data stream that satisfies said criteria and discarding said duplicate data stream that does not satisfy said criteria (see Fig. 2, col. 6, lines 40-49);

(e) if both of said duplicate data streams satisfy said criteria, then arbitrarily selecting one of said duplicate data streams and arbitrarily discarding the non-selected duplicate data stream (see Fig. 2, col. 6, lines 40-49).

Regarding claims 24, 32, and 33, Hosler discloses said duplicate data streams are received through redundant data paths from a second router system within said communication system (see Fig. 2, col. 5, lines 40-47).

Regarding claim 35, Hosler discloses an occurrence of a failure within said data paths interconnecting said first router system with said second router system is detected and corrected independently by each of said first router system and said second router system, such that control communication between said first router system and said second router system is not required (see Fig. 2, col. 6, lines 47-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4, 8, and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,031,252 (hereinafter referred as "Hosler") in view of US Patent 6,829,237 (hereinafter referred as "Carson").

Regarding claim 4, Hosler does not disclose a control processor. However, Carson discloses the control processor (see Fig. 2, element 23, col. 2, lines 16-22, 30-38). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the control processor teaching by Carson with Hosler. The motivation for doing so would have been to provide to perform routing function, read data from the input ports, and determine the next hop read on column 2, lines 29-35. Therefore, it would have been obvious to combine Carson and Hosler to obtain the invention as specified in the claim 4.

Regarding claims 8 and 11-20, Hosler does not disclose optical switch. However, Carson discloses optical switch (see Fig. 8, col. 8, lines 29-38). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine optical switch teaching by Carson with Hosler. The motivation for doing so would have been to offer many ports while being compactly constructed and operates at a very low power read on column 5, lines 56-60. Therefore, it would have been obvious to combine Carson and Hosler to obtain the invention as specified in the claims 8 and 11-20.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: December 20, 2006

PHIRIN SAM
PRIMARY EXAMINER